

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/015244 A1

(51) International Patent Classification⁷: G01P 21/00,
15/16, B60K 41/00, F16H 59/48, B60T 8/00

(21) International Application Number:
PCT/GB2004/002348

(22) International Filing Date: 3 June 2004 (03.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0316382.1 12 July 2003 (12.07.2003) GB

(71) Applicant (for all designated States except US): TORO-TRAK (DEVELOPMENT) LIMITED [—/GB]; 1 Aston Way, Leyland, Lancashire PR26 7UX (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MURRAY, Stephen, William [GB/GB]; St Michaels, Preston Road, Grimsargh PR2 5SD (GB).

(74) Agent: W.P. THOMPSON & CO; Coopers Building, Church Street, Liverpool L1 3AB (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

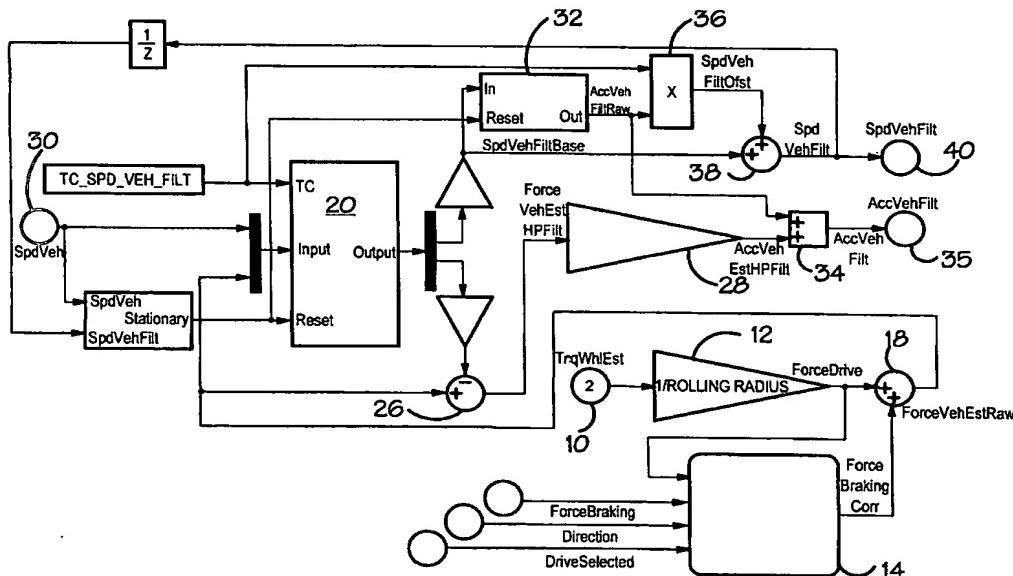
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND DEVICE FOR DETERMINING MOTOR VEHICLE ACCELERATION



(57) Abstract: A method is disclosed for obtaining a signal representing motor vehicle acceleration. The method involves obtaining a high pass filtered vehicle acceleration signal and a low pass filtered vehicle acceleration signal. One of these signals (preferably the high pass filtered signal) is obtained based upon the net driving force applied to the vehicle, which can be used to obtain an estimate of acceleration by means of an adoptive vehicle model (28). The other signal is obtained by measurement, for example by differentiating a measured vehicle speed signal with respect to time. Adding the two filtered signals together gives a vehicle acceleration signal of potentially good quality.

WO 2005/015244 A1